1.   A micro-mobility network routing system comprising:

(a)   home agent means;

(b)   Internet IP means;

(c)   micro-mobility network routing protocol means;

5   (d)   wireless device means;

wherein

said home agent means communicates with said wireless device means via said Internet IP means under supervision of said micro-mobility network routing

10   protocol means; and

said Internet IP means further comprises one or more Main Access Routers, Routers, and/or Base Station Routers.

2. The micro-mobility network routing system of Claim 1 wherein said micro-mobility network routing protocol means further comprises:

    (a) Mobile Node Advertisement Extension (MNAE) structures;

    (b) Base Station Router (BSR) Extension structures;

    (c) Multicast Address Extension (MAE) structures;

    (d) Neighbor Update Extension (NUE) structures;

    wherein

    said structures augment Mobile IP communication protocols to affect micro-mobility network routing functionality and IP connectivity between said home agent means and said wireless device means.

3. The micro-mobility network routing system of Claim 1 wherein said home agent means is also a wireless device means.

4. The micro-mobility network routing system of Claim 1 wherein said micro-mobility network routing protocol means is distributed in software operating on main access routers, routers, and base station routers.

5. The micro-mobility network routing system of Claim 1 wherein said micro-mobility network routing protocol means implements a make-before-break routing protocol.

6. The micro-mobility network routing system of Claim 1 wherein said communication occurs over the Internet.

7. The micro-mobility network routing system of Claim 1 wherein one or more components of said system is implemented on a personal computer (PC).

8. The micro-mobility network routing system of Claim 1 wherein one or more components of said system is implemented on a wireless radio transceiver.

9. The micro-mobility network routing system of Claim 1 wherein said wireless device operates within a foreign network domain.

10. The micro-mobility network routing system of Claim 1 wherein said wireless device operates within a home network domain.

11. A micro-mobility network routing method comprising:

(1) communicating to a base station router (BSR) that a mobile node (MN) has entered the coverage area of a wireless domain (WD) via a neighbor binding extension message;

(2) communicating to a main access router (MAR) said MN IP address from said BSR with a BSR extension message;

(3) communicating to said BSR the multicast address assigned to said MN with a multicast address extension message; and

(4) communicating to said BSR of said MN characteristics with a mobile node advertisement extension message;

wherein

said communication occurs over an Internet IP means;

said communication occurs between a home agent means and a wireless device means; and

said communication is under supervision of a micro-mobility network routing protocol means.

12. The micro-mobility network routing method of Claim 11 wherein said micro-mobility network routing protocol means further comprises:

    (a) Mobile Node Advertisement Extension (MNAE) 5   structures;

    (b) Base Station Router (BSR) Extension structures;

    (c) Multicast Address Extension (MAE) structures;

    (d) Neighbor Update Extension (NUE) structures;

wherein

10   said structures augment Mobile IP communication protocols to affect micro-mobility network routing functionality and IP connectivity between said home agent means and said wireless device means.

13. The micro-mobility network routing method of Claim 11 15   wherein said home agent means is also a wireless device means.

14. The micro-mobility network routing method of Claim 11 wherein said micro-mobility network routing protocol means is distributed in software operating on main 20   access routers, routers, and base station routers.

15. The micro-mobility network routing method of Claim 11 wherein said micro-mobility network routing protocol means implements a make-before-break routing protocol.

16. The micro-mobility network routing method of Claim 11 wherein said communication occurs over the Internet.

17. The micro-mobility network routing method of Claim 11 wherein one or more steps of said method is implemented on a personal computer (PC).

18. The micro-mobility network routing method of Claim 11 wherein one or more steps of said method is implemented on a wireless radio transceiver.

19. The micro-mobility network routing method of Claim 11 wherein said wireless device operates within a foreign network domain.

20. The micro-mobility network routing method of Claim 11 wherein said wireless device operates within a home network domain.

21. A computer usable medium having computer-readable program code means providing micro-mobility network routing functionality, said computer-readable program means comprising:

5 (1) computer program code means for communicating to a base station router (BSR) that a mobile node (MN) has entered the coverage area of a wireless domain (WD) via a neighbor binding extension message;

(2) computer program code means for communicating to a
10 main access router (MAR) said MN IP address from said BSR with a BSR extension message;

(3) computer program code means for communicating to said BSR the multicast address assigned to said MN with a multicast address extension message; and

15 (4) computer program code means for communicating to said BSR of said MN characteristics with a mobile node advertisement extension message;

wherein

said communication occurs over an Internet IP means;

20 said communication occurs between a home agent means and a wireless device means; and

said communication is under supervision of a micro-

mobility network routing protocol means.

22. The computer usable medium of Claim 21 wherein said micro-mobility network routing protocol means further comprises:

  (a) Mobile Node Advertisement Extension (MNAE) structures;

  (b) Base Station Router (BSR) Extension structures;

  (c) Multicast Address Extension (MAE) structures;

  (d) Neighbor Update Extension (NUE) structures;

  wherein

  said structures augment Mobile IP communication protocols to affect micro-mobility network routing functionality and IP connectivity between said home agent means and said wireless device means.

23. The computer usable medium of Claim 21 wherein said home agent means is also a wireless device means.

24. The computer usable medium of Claim 21 wherein said micro-mobility network routing protocol means is distributed in software operating on main access routers, routers, and base station routers.

25. The computer usable medium of Claim 21 wherein said micro-mobility network routing protocol means implements a make-before-break routing protocol.

26. The computer usable medium of Claim 21 wherein said communication occurs over the Internet.

27. The computer usable medium of Claim 21 wherein medium is compatible with a personal computer (PC).

28. The computer usable medium of Claim 21 wherein medium is compatible with a wireless radio transceiver.

29. The computer usable medium of Claim 21 wherein said wireless device operates within a foreign network domain.

30. The computer usable medium of Claim 21 wherein said wireless device operates within a home network domain.

31. A micro-mobility network routing encoded propagated signal data stream constructed using

    (1) mobile node advertisement extension (MNAE) structure means;

    (2) base station router (BSR) extension structure means;

    (3) multicast address extension (MAE) structure means; and

    (4) neighbor update extension (NUE) structure means;

wherein

said signal is at least partially communicated via wireless communication means; and

said encoded signal communicates between two nodes in a distributed network over the Internet.